LESSON 2.3

NAME _____ DATE _____

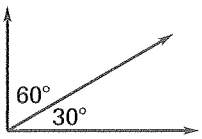
Practice A

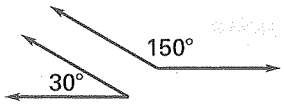
For use with pages 67–73

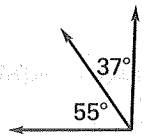
Decide whether the statement is *true* or *false*. If the statement is false, reword the statement so that the statement is true.

1. Two angles are complementary if the sum of their measures is 180°.
2. Two angles are supplementary if the sum of their measures is 180°.
3. Two angles are adjacent angles if they share a common vertex.
4. A theorem is a true statement that follows from other true statements.

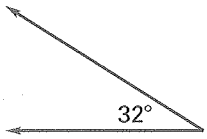
Determine whether the angles are *complementary*, *supplementary*, or *neither*.

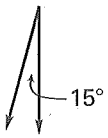
5. 

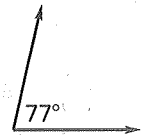
6. 

7. 

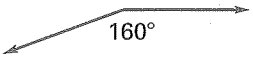
Find the measure of a complement of the angle given.

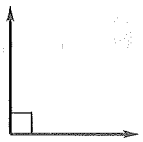
8. 

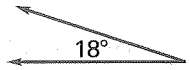
9. 

10. 

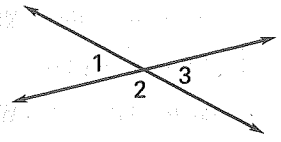
Find the measure of a supplement of the angle given.

11. 

12. 

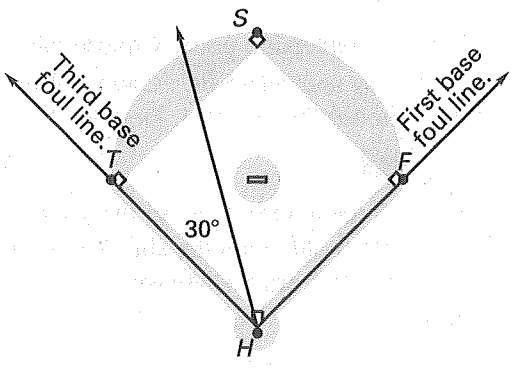
13. 

Use the diagram to complete the statement.



14. $\angle 1$ and ___?___ are supplementary angles.
15. $\angle 3$ and ___?___ are supplementary angles.
16. ___?___ $\cong$ ___?___ by the Congruent Supplements Theorem.

17. The foul lines of a baseball field intersect at home plate to form a right angle, $\angle THF$. You hit a baseball whose path forms an angle of 30° with the third base foul line. What is the measure of the angle formed by the first base foul line and the path of the ball?



Lesson 2.3

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NAME _____ DATE _____

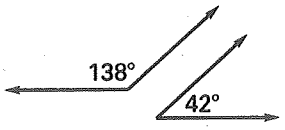
Practice B

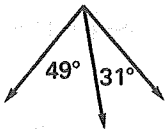
For use with pages 67–73

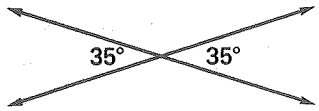
Complete the statement.

1. Two angles are complementary if the sum of their measures is __?__ °.
2. Two angles are supplementary if the sum of their measures is __?__ °.
3. If two angles share a common vertex and side, but have no common interior points, then the two angles are __?__ angles.
4. A true statement that follows from other true statements is called a __?__.

Determine whether the angles whose measures are given are *complementary, supplementary,* or *neither.* Also tell whether the angles are *adjacent* or *nonadjacent.*

5. 

6. 

7. 

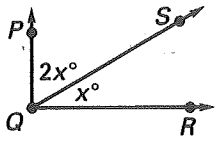
Find the measure of a complement of the angle.

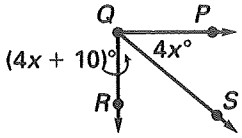
8. $m\angle Y = 40°$
9. $m\angle K = 12°$
10. $m\angle P = 64°$
11. $m\angle T = 85°$

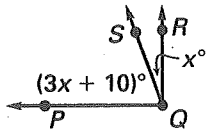
Find the measure of a supplement of the angle.

12. $m\angle A = 54°$
13. $m\angle R = 115°$
14. $m\angle Z = 22°$
15. $m\angle F = 90°$

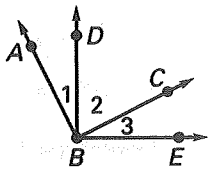
***∠PQS* and *∠SQR* are complementary angles. Find the value of the variable.**

16. 

17. 

18. 

19. $\angle ABC$ and $\angle DBE$ are right angles. Name an angle that is congruent to $\angle 3$. Explain.



In Exercises 20 and 21, use the drawing of a teeter-totter.

20. The marked angles are supplementary. Find the value of x.
21. By how many degrees would the angle of the teeter-totter have to change so that it forms a right angle with its vertical support bar? (Hint: Find the measure of a complement of a 74° angle.)